



STATE OF MARYLAND

# DMHM

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**December 9, 2011**

## Public Health & Emergency Preparedness Bulletin: # 2011:48 Reporting for the week ending 12/03/11 (MMWR Week #48)

### CURRENT HOMELAND SECURITY THREAT LEVELS

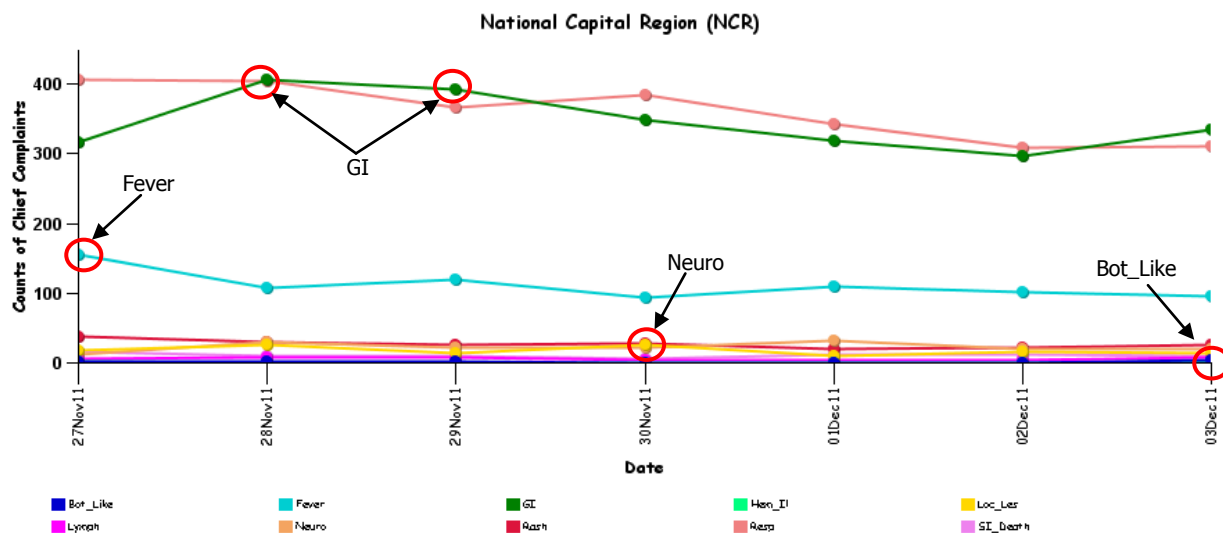
**National:** No Active Alerts  
**Maryland:** Level One (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

#### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

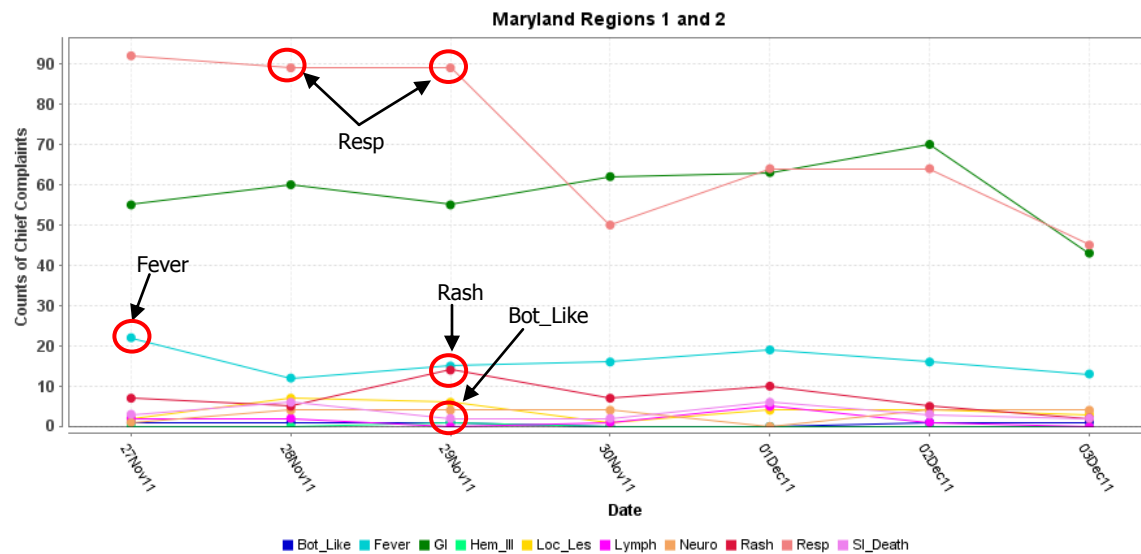
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

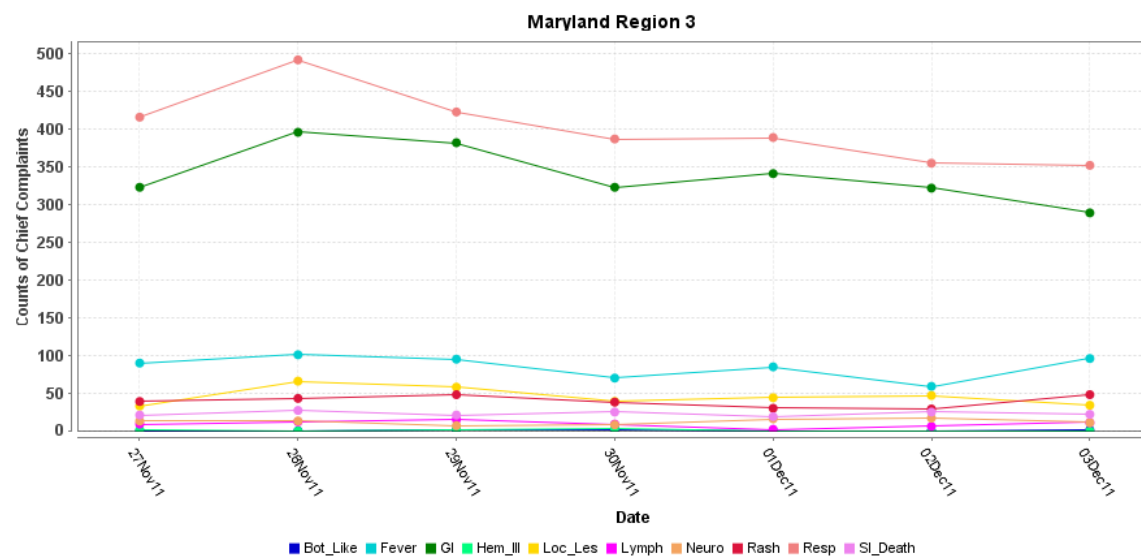


\*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

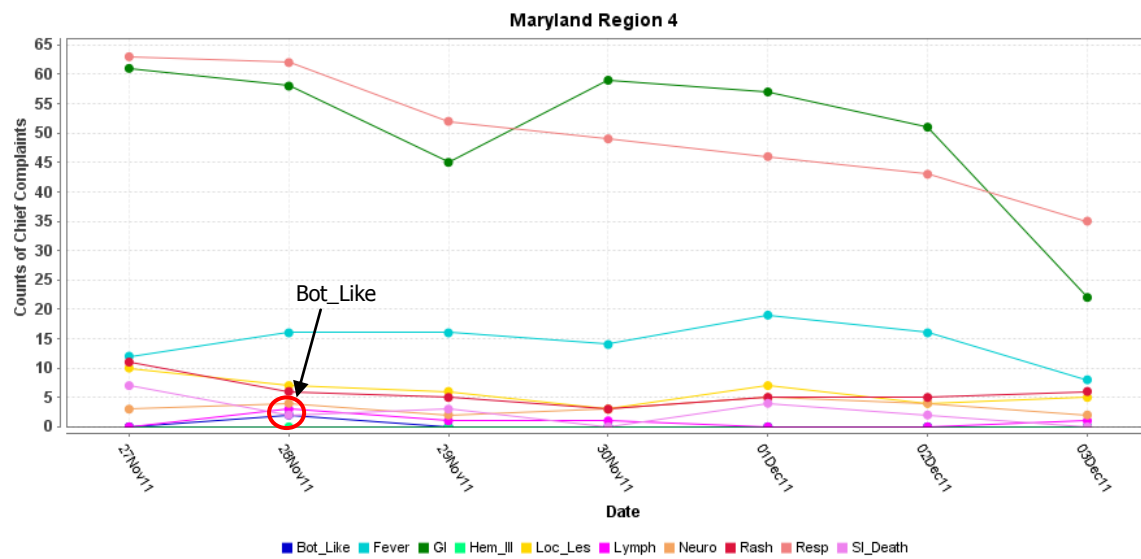
## MARYLAND ESSENCE:



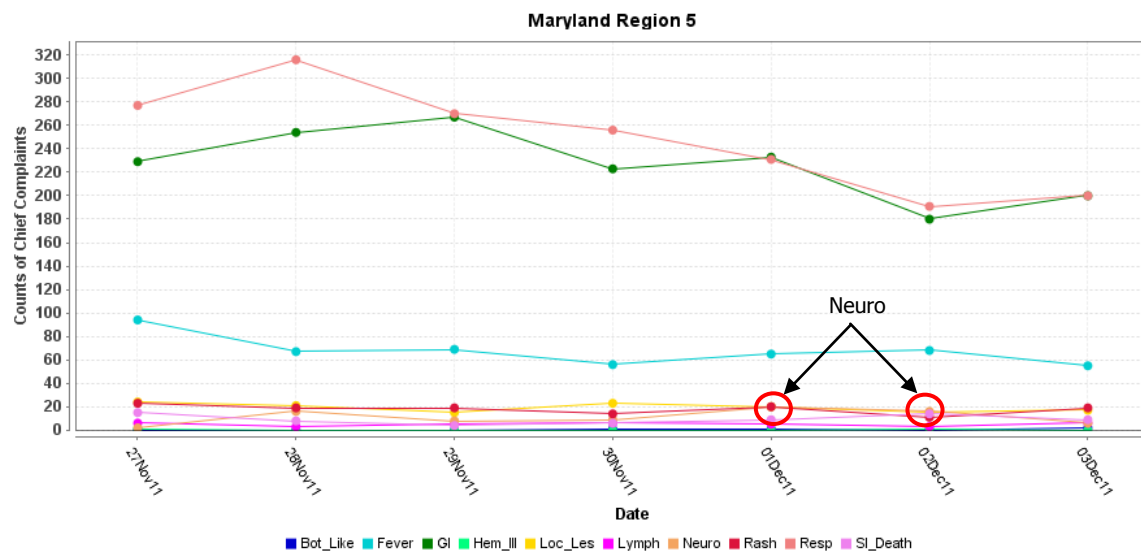
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

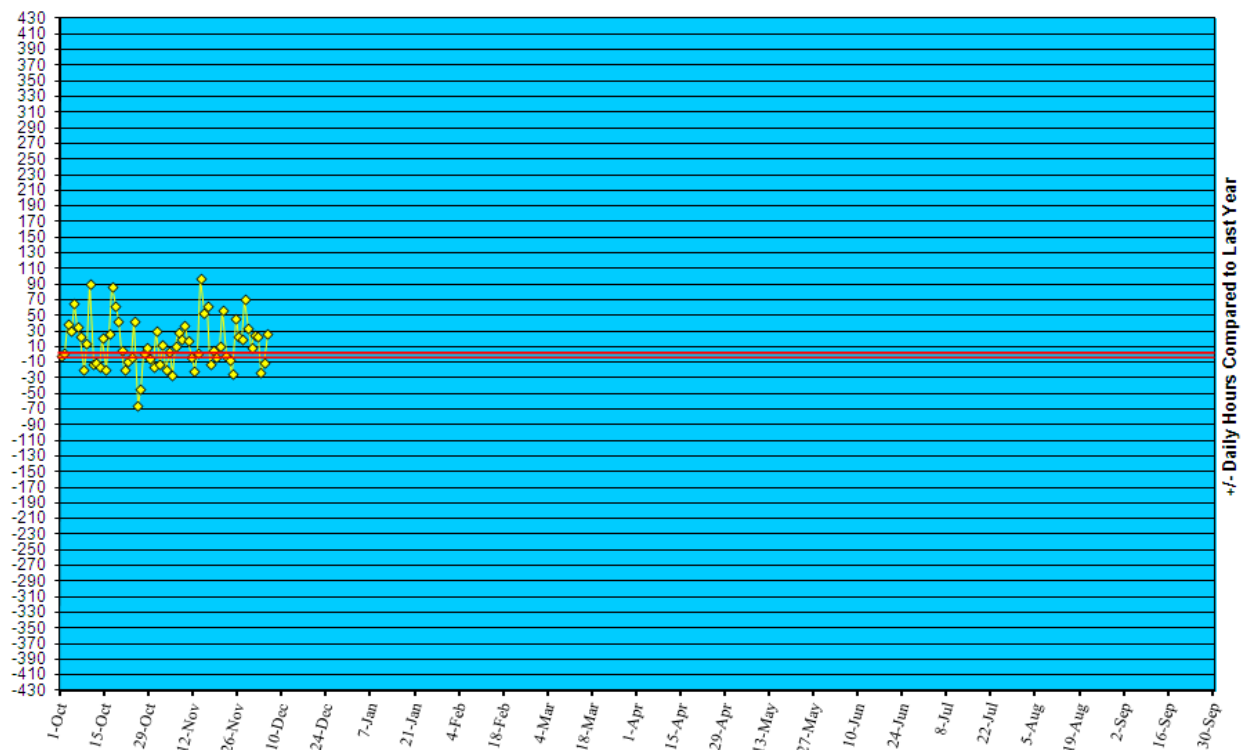


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/11.

### **Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '11 to December 3, '11**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2011 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (November 27 – December 3, 2011):	8	0
Prior week (November 20 – November 26, 2011):	4	0
Week#48, 2010 (November 28 – December 4, 2010):	1	0

## 5 outbreaks were reported to DHMH during MMWR week 48 (November 27-December 3, 2011)

### 4 Gastroenteritis outbreaks

- 1 outbreak of GASTROENTERITIS in a Nursing Home
- 1 outbreak of GASTROENTERITIS in an Assisted Living Facility
- 1 outbreak of GASTROENTERITIS in a Workplace
- 1 outbreak of GASTROENTERITIS in a Private Home

### 1 Respiratory illness outbreak

- 1 outbreak of PNEUMONIA in an Assisted Living Facility

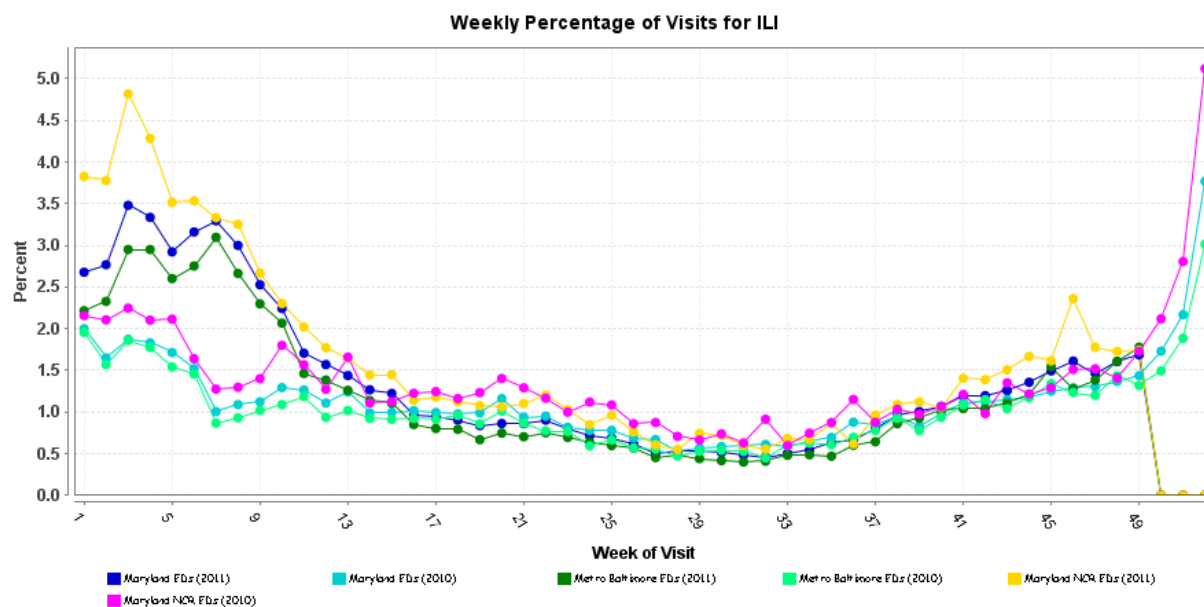
## MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 48 was: No activity, Minimal Intensity.

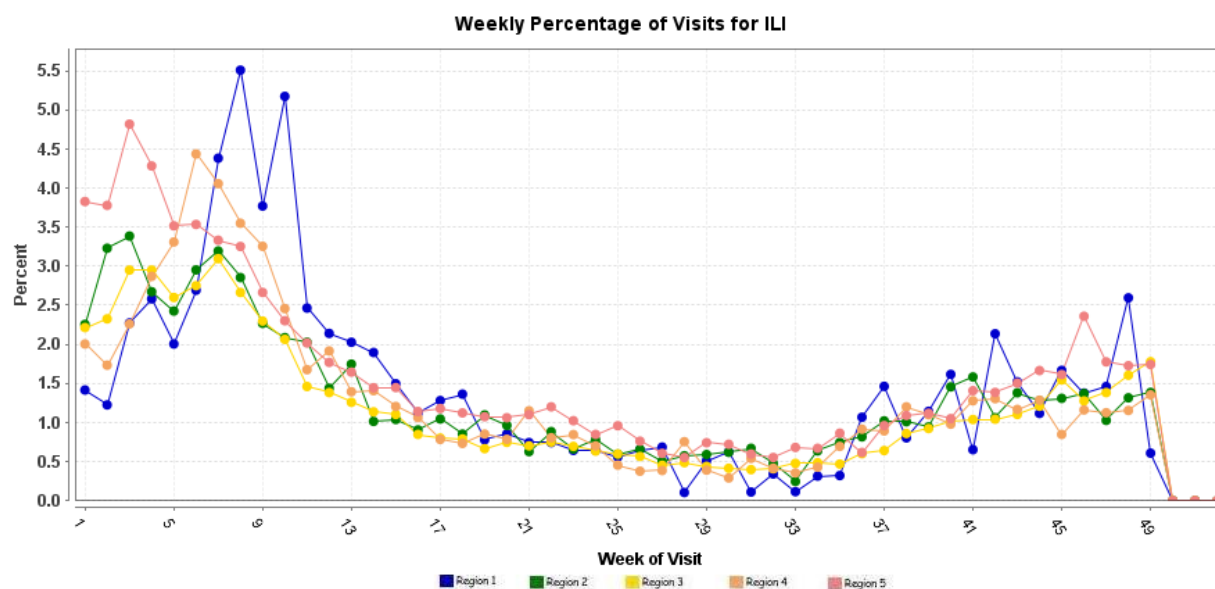
## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



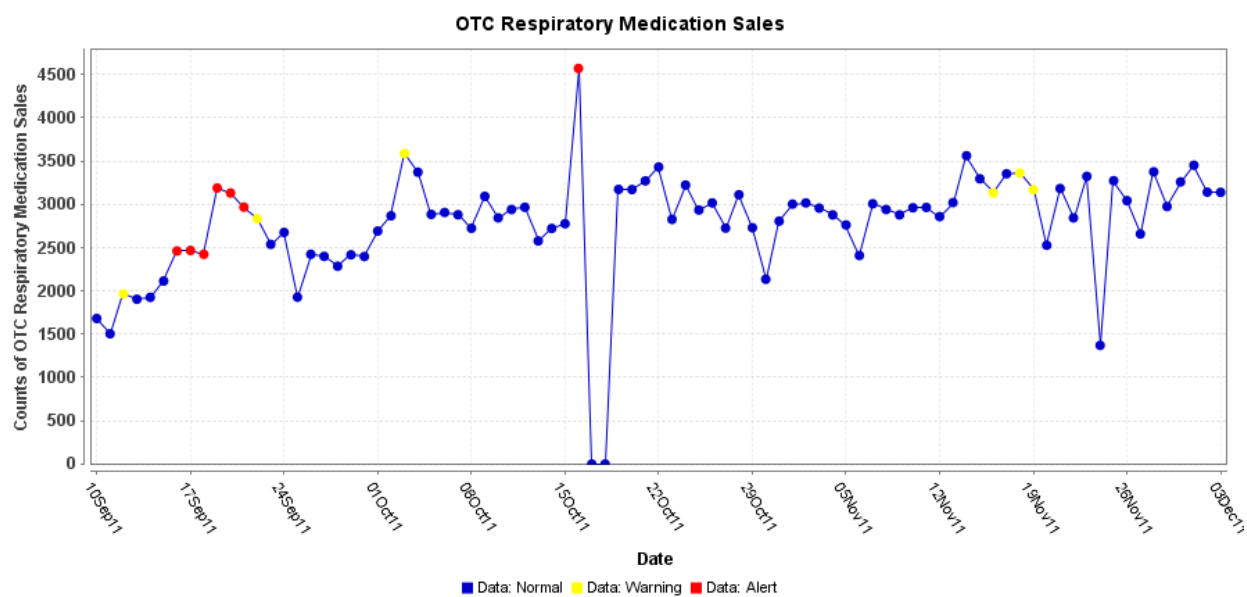
\* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

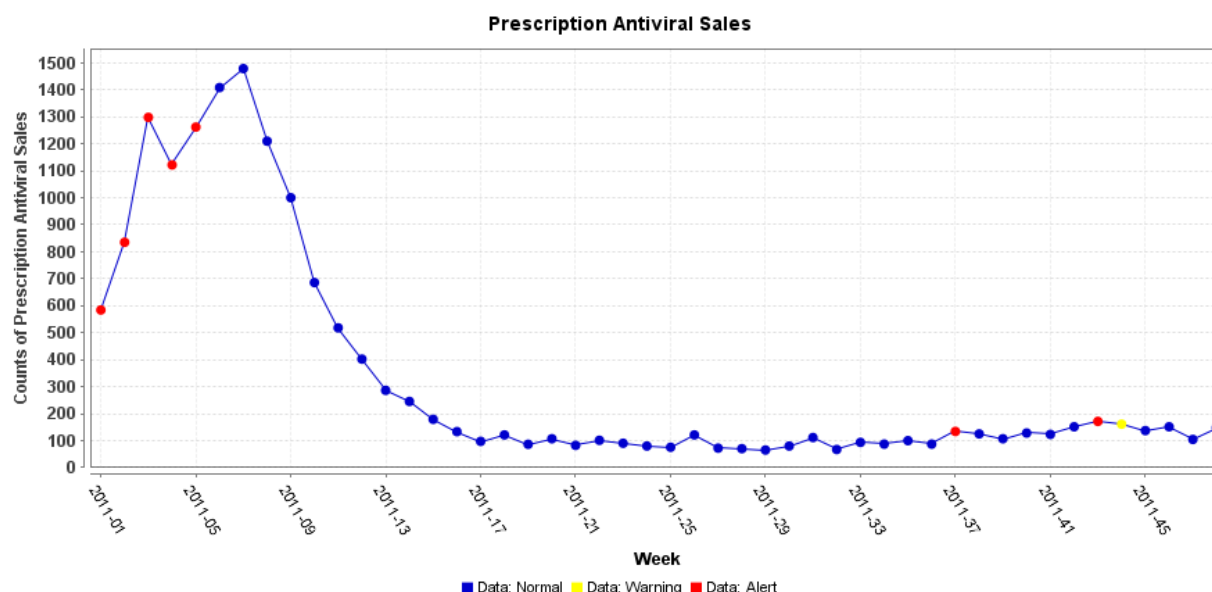
### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



## PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



## PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of November 29, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 571, of which 335 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

## NATIONAL DISEASE REPORTS

**LEGIONELLOSIS (USA):** 29 November 2011, Legionnaires' disease, a type of pneumonia, is on the rise in New England this year [2011], and the reason for the flare-up remains unexplained, health officials said on Tuesday [29 Nov 2011]. Total cases confirmed in Maine, Massachusetts, and Connecticut have nearly doubled from last year [2010] while many other northeastern states were also showing sharp increases. States in other parts of the country were not. Maine's Center for Disease Control and Prevention issued an advisory on Monday [28 Nov 2011] to all state health care providers to watch for and report Legionnaires' cases after it documented 18 cases so far this year, up from 11 in all of 2010. "This is a spike, and we need to be looking into this and we need to alert people," Maine's state epidemiologist, Dr Stephen Sears, told Reuters. Legionnaires' disease is caused by inhaling an infectious dose of *Legionella* bacteria, usually found in contaminated water in sources such as cooling towers, whirlpool spas, showers, and faucets. The illness, named for a 1976 outbreak at an American Legion convention in Philadelphia, causes pneumonia and kills 5 to 30 percent of patients, with 8000 to 18 000 people hospitalized each year. Symptoms can include high fever, chills, chest pain, a cough, and often headaches and muscle aches. It can be treated with antibiotics. Hard-hit Massachusetts confirmed 211 Legionnaires' disease cases as of 23 Nov 2011, up from 118 cases in all of 2010, while Connecticut saw 72 cases, versus just 47 last year, said Jeff Dimond, a CDC spokesman in Atlanta. In the Mid-Atlantic, populous New York State reported 526 cases this year compared to 379 last year, and Pennsylvania saw 450 cases, up from 299 last year, the CDC said. By contrast, California, with its 200 cases this year, has a mere 10 more than it counted during 2010. Maine epidemiologist Sears has spoken with his Massachusetts and Connecticut counterparts about the jump in scattered individual cases this fall [2011] in New England, but they have not yet managed to pinpoint a specific reason for it. Experts were considering possibilities such as an increased awareness of Legionnaires' [disease] that has led to more testing, changes in climate, more air conditioner usage, and an increase in the number

of seniors, who are more susceptible to infection. "We have looked but we haven't found common connections at this point," Sears said. "We've found nothing that tied the people together epidemiologically." (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**FOODBORNE ILLNESS (NORTH DAKOTA):** 28 November 2011, About 90 percent of the 184 inmates at the Cass County Jail became ill Sunday night and early Monday [27-28 Nov 2011], with a potential foodborne illness, Sheriff Paul Laney said. Symptoms of the flu-like illness included diarrhea, vomiting, and cramps, Laney said Monday, [28 Nov 2011] at a news conference. None of the inmates had to be taken to a hospital for treatment, though nurses from Fargo Cass Public Health did treat those whose symptoms were most severe, the jail's chief nurse Heidi McLean said. Hydration was the main treatment, with inmates being urged to drink Gatorade [sports drink made of water, carbohydrates, and electrolytes] and water, she said. Doug Jensen, a registered sanitarian with Fargo Cass Public Health, said all aspects of food supply, storage, and preparation will be examined to try to determine where the illness came from. There were no reports of illnesses among staff, Laney said. No inmates missed court appearances due to the wave of illness, jail staff said. And some had already felt well enough to eat lunch on 28 Nov 2011, Laney said. Inmates were served a casserole with ground turkey, chili, and macaroni; corn; cornbread; whipped butter; cookies; and a powdered drink for supper Sun 27 Nov 2011, Laney said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS**

**BOTULISM, SMOKED TROUT (CANADA):** 28 November 2011, The Canadian Food Inspection Agency (CFIA) and Milford Bay Trout Farm Inc. are warning the public not to consume the Milford Bay Trout Farm Inc. Smoked Trout Filet, described below, because this product may be contaminated with *Clostridium botulinum*. Toxins produced by this bacteria may cause botulism, a life-threatening illness. The affected product, Milford Bay Trout Farm Inc. Smoked Trout Filet, is sold vacuum packed at various weights. All best before dates and lot codes are affected. The package bears no UPC. This product has been distributed in Ontario. There have been no reported illnesses associated with the consumption of this product. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

**ANTIBIOTIC RESISTANT E. COLI (UK):** 28 November 2011, A 3rd baby at a hospital where 2 babies died in an *Escherichia coli* outbreak is suspected of having the potentially fatal infection. The latest case is a baby who is carrying the bacteria without any signs of infection, health chiefs confirmed last night [25 Nov 2011]. The maternity unit at Singleton Hospital, in Swansea, south Wales, continues to be restricted to full-term babies following the deaths. Hopes that it could reopen in full to all pregnancies yesterday were put on hold. 'A 3rd case of ESBL [extended spectrum beta-lactamase] *E. coli* cross infection is unfortunately suspected at the maternity/neonatal unit at Singleton Hospital,' a spokeswoman said. 'This latest case involves another baby who is carrying the bacteria without any signs of infection. The baby has been a patient in the neonatal unit at the hospital within the past month. Further tests are now under way to confirm the cross infection.' Abertawe Bro Morgannwg (ABM) University Health Board, which runs the hospital, announced that 2 babies had died from an ESBL *E. coli* infection on Tuesday [22 Nov 2011]. [One of the 2 infants who died], described as 'very premature' by hospital officials, died of the ESBL *E. coli* infection after being born at the unit. The 2nd case involved a baby whose mother is suspected of contracting the infection at the hospital. Health chiefs have stressed that ESBL *E. coli* is not the same as *E. coli* O157, which causes food poisoning. In most people ESBL *E. coli* does not cause harm but in vulnerable individuals, such as premature babies and the elderly, it can cause serious infections. An investigation into how the *E. coli* bug was transmitted is continuing. It is looking at a total of 5 ESBL *E. coli* infections, 3 among adults. Of the 5 cases 3 were contracted outside the hospital. An independent investigation, reviewing the hospital's response to the outbreak, is to be carried out by Healthcare Inspectorate Wales. Extra precautions have been put in place at the hospital's maternity unit. 'We are also taking additional precautions, including restricting visitors to the maternity unit, and we are continuing to ask visitors to wash their hands and use hand hygiene gel,' the health board spokeswoman said. She said that checks of equipment and the environment in the maternity and neonatal unit have all been negative for the bug. 'Despite stringent hygiene controls these cross infection incidents have occurred, which we very much regret,' she said. 'Our investigations into the cross infection have not yet identified how the ESBL *E. coli* was transmitted, but we continue to do all we can to determine the cause. However, in other similar instances of this kind elsewhere in the UK the cause of transmission was never identified. We would like to again reassure mothers-to-be that the maternity unit remains open as usual for full term births.' (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**BOLIVIAN HEMORRHAGIC FEVER (BOLIVIA):** 30 November 2011, On Wed 30 Nov 2011, the head of epidemiology of the Departmental [state or province equivalent] Health Department (SEDES), Wilfredo Camargo, stated that strong efforts were made to control an outbreak of the terrible hemorrhagic fever near Trinidad. He indicated that currently 3 brigades are in the Elvira area along the highway to Santa Cruz, 35 km [21 mi] from the capital of Beni [department], capturing and identifying rodents. They are also training community members and students of the educational institutions of this community to avoid spread of the terrible disease, endemic in the Mamore province. "We are moving from Elvira to Trinidad in all the ranches, dairy farms, [agricultural] plots, and rice mills in the area," explained the physician. In parallel to this activity, a "zero prevalence" study is being done, that is to say, people who more than a month ago presented with symptoms including fever and pain, are being investigated in order to determine if Machupo virus [antibodies?], which is transmitted by the *Calomys callosus*, mouse circulated in their bodies. Camargo reported that 80 per cent of the mice captured -- more than 200 in 7 days -- have been identified as *Calomys callosus* which is the host that transmits the disease [virus]. The specialist expressed his concern because in the 15 years that he has worked in the area of hemorrhagic fever, it has been confirmed that the virus has moved to other provinces, that is to say, it is not just found in the endemic area of Mamore province. In 2004, 2 cases of hemorrhagic fever were detected along the border with Cochabamba [department], at which time the minister of health named the virus Chapare; later other cases were registered in Santa Rosa, on the border with Riberalta [municipality], Bolivian province [Beni]. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case



## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmf.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmf.maryland.gov/flusurvey>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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